REMARKS

The final Office Action dated April 27, 2005, and the Advisory Action dated July 12, 2005, have been received and carefully noted. The following remarks in response to the Office Action dated April 27, 2005 and the included Request for Continued Examination, are submitted as a full and complete response thereto.

In the Advisory Action, it is indicated that although in the Response After Final, figures 4 and 5 of the present application are referred to as illustrating an embodiment of the present invention, figure 6 of the present application teaches the present invention. Applicants respectfully traverse such contention.

Figure 6 of the present application illustrates a further embodiment of the present invention in which neither downlink or uplink transmission is performed in fixedly allocated time slots in subsequent frames. See page 12, lines 26-36. However, as Applicants indicated in the Response filed on June 24, 2005, independent claim 19 recites, "transmission in said first direction **occurs in predetermined and fixed time slots (TS[j]) in each of consecutive frames (F[i], F[i+1])**, and transmission in said second direction occurs in different time slots (Ts[k], Ts[l]) in each of consecutive frames (F[i], F[i+1])." Emphasis added. Thus, figure 6 of the present invention is being incorrectly compared to the figures of the cited references and it is incorrectly asserted in the Advisory Action that figure 6 is illustrating the recitations of independent claim 19, for instance.

As indicated in the Response of June 24, 2005, figure 4 illustrates a case in which transmission in uplink direction is performed in fixedly allocated time slots TS. See page 11, lines 11-20. However, with regard to downlink transmission, time hopping is performed. Figure 5, in turn, shows a further embodiment in which transmission in downlink direction is performed in fixedly allocated time slots. See page 12, lines 6-20. However, with regard to uplink transmission, time hopping is performed. Thus, figures 4 and 5 of the present invention provide adequate support to the recitations of independent claim 19. For similar reasons, figures 4 and 5 of the present invention provide adequate support to the recitations of independent claim 20. Naturally, other portions of the Specification may be referred to for supplemental support.

In the reasons for maintaining the rejection to the claims, in previous Office Actions and in the remarks of the Advisory Action, the claim recitations are not addressed at all. Instead, it appears that the rejections to claims are maintained based primarily on a figure-to-figure comparison. Specifically, it appears that the rejections to the claims are maintained because, according to the Advisory Action, figure 3 of Haartsen illustrates the embodiment shown in figure 6 of the present application. It is respectfully asserted that in order to properly reject claims under 35 U.S.C. § 103, the references cited must, individually or combined, teach or suggest all the recitations of the pending claims. A rejection to the claims based on a figure-to-figure comparison is an improper obviousness rejection under current patent rules and procedures.

Furthermore, according to the Advisory Action, in view of the description provided in column 2, lines 42-49, of Haartsen, a person skilled in the art would be prompted to change either the uplink or the downlink time slots. Applicants respectfully traverse such contention. The referred passage of Haartsen appears to describe a problem regarding interference in a much more general way, wherein at least no distinction between downlink and uplink channels can be observed. In particular, as also derivable from the abstract of Haartsen, the hopping of the time slots depend **on the time of information transmitted** in the time slot, and not on the downlink or uplink direction. Emphasis added.

According to figure 3, column 7, lines 51-57, and column 8, lines 19-43, of Haartsen, by applying time hopping, there is a severe risk that the return channel becomes available before all the data in a frame have been transferred, such that acknowledgement within the same frame is not possible. Haartsen would appear to teach away from the recitations of the presently claimed application and is also silent as to teaching or suggesting the recitations of the transmission in a first direction, transmission in the second direction, and the transmission in the second direction during a first frame of consecutive frames and during a subsequent second frame of the consecutive frames recited in independent claims 19 and 20. To cure the deficiencies of Haartsen, Scott is relied upon as teaching the recitations of the transmission as recited in independent claims 19 and 20.

However, Scott does not cure the deficient of Haartsen. Although Scott provides that time hopping pattern may be programmed in advance in each of the user stations, thereby allowing each user station to know in advance the time hopping pattern (See Summary of The Invention, column 2, lines 35-47), such time hopping pattern is a pseudorandom hopping pattern in each of consecutive frames. Also, although Scott describes a time hopping pattern, such an orthogonal pattern, to odd or even time slots and Haartsen describes that data communication channels may occupy a fixed position in a frame and voice communication may occupy a hopping pattern, the references combined do not teach or suggest, "transmission in said first direction occurs in predetermined and fixed time slots (TS[j]) in each of consecutive frames (F[i], F[i+1]), and transmission in said second direction occurs in different time slots (Ts[k], Ts[l]) in each of consecutive frames (F[i], F[i+1])," as recited in the claims. Haartsen and Scott do not appear to describe having a downlink in a fixed time slots in each consecutive frame and an uplink transmission in a hopping pattern, or vice-versa. Rather than based on a particular transmission direction, the transmission in Scott varies depending on the type of data. In Haartsen, the particular transmission is dependent on odd time slots or even time slots, not on the transmission direction (uplink or downlink).

The transmission provided in Haartsen and Scott do not describe the specific features for the first frame of the consecutive frame and does not describe the specific features of subsequent second frame of the consecutive frames as in independent claim 19. Scott merely provides that by inserting the dead time slot 2603, the number of user

stations 102 communicating in odd and even time slots 2602 also varies pseudorandomly. Haartsen is silent as to such specific recitations of independent claim 19. Thus, the transmission recited in independent claim 19 is distinct from Haartsen and Scott.

Also, the hopping scheme of Scott varies from frame to frame. Haartsen is devoid of any teaching or suggestion pertaining to the transmission in the first direction as recited in independent claim 19. Thus, a combination of Haartsen and Scott would not provide for all of the recitations of independent claim 19.

Because independent claim 20 includes similar claim features as those recited in independent claim 19, although of different scope, and because the Office Action refers to similar portions of the cited references to reject independent claims 19 and 20, the arguments presented above supporting the patentability of independent claim 19 are incorporated herein to support the patentability of independent claim 20.

Accordingly, in view of the foregoing, it is respectfully requested that the rejection to the claims be withdrawn and the independent claims 19 and 20 and related dependent claims be allowed.

CONCLUSION:

In view of the above, applicant respectfully submits that the claimed invention recites subject matter which is neither disclosed nor suggested in the cited prior art. Applicant further submits that the subject matter is more than sufficient to render the

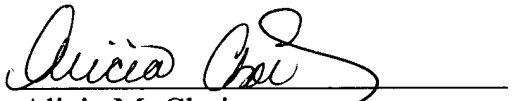
claimed invention unobvious to a person of skill in the art. Applicant therefore respectfully requests that each of claims 19-30 be found allowable and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time.

Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



Alicia M. Choi
Registration No. 46,621

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

AMC:scw
Enclosures: Petition for Extension of Time (1 month)
Request for Continued Examination Transmittal